

of components existing on said wiring, and after extracting circuit information of said driver corresponding to one of said pair];

a wiring segment [extraction] identifying unit for [extracting] identifying a wiring segment that is nearest to said board edge from a group of segments [each defining a set of a minimum unit of a wiring configuration for said wiring];

a plane edge [specifying] identifying unit for [specifying] identifying a plane edge that is nearest, in a perpendicular direction, to a wiring between [a] the driver and [a] the receiver [in] of said segment [as a result of a survey of the wiring configuration of said segment extracted];

a unit for determining a perpendicular distance between the wiring segment extending from the driver to the receiver [of said segment] and said plane edge;

a unit for computing a minimum interlayer distance required between a wiring layer of said segment and a layer of said plane [on the basis of a pattern and a circuit design specification on the wiring configuration of the extracted segment];

a distance determination unit for comparing said perpendicular distance determined and said interlayer distance computed; and

thereafter, automatically identifying any segments that are not desirable.

[a message display unit for displaying a message that contains a predetermined instruction corresponding to said wiring in accordance with a result of determination by said distance determination unit.]

2. (Once Amended) A printed circuit board wiring configuration check system as claimed in claim 1, further comprising:

a unit for [computing] identifying a voltage level of a pulse signal [current] flowing through said wiring segment [according to said circuit information]; and

a [second object determination] unit for [determining] identifying [a presence of] a high speed signal wiring when said voltage level [computed] is not lower than a [predetermined] reference voltage.

3. (Currently Amended) A printed circuit board wiring configuration [check] analysis system as claimed in claim 2, wherein

said unit for [computing] identifying the voltage level of the pulse [current] signal [computes] determines a voltage level thereof on the basis of [a result of determination of a predetermined conditional] an equation which contains, as its variable, a maximum applicable frequency, a rise time, a pulse width and an amplitude [that are included in said circuit information].

4. (Currently Amended) A printed circuit board wiring configuration [check] analysis system as claimed in claim 1, wherein

said wiring configuration is classified, as its type, a micro strip line, a single strip line, or a double strip line.

5. (Currently Amended) A printed circuit board wiring configuration [check] analysis system as claimed in claim 1, further comprising

a display unit for displaying a message in accordance with a result of [computation obtained using a predetermined mathematical equation which contains at least a part of said circuit information as its variable] the analysis.

6. (Currently Amended) A method for [checking] analyzing a wiring configuration [which is tentatively designed on a printed circuit board], comprising the steps of:

determining if there [exists] is a high speed signal wiring [using circuit information of said printed circuit board], said determination being executed after [extracting] identifying a pair of a driver and a receiver [sequentially from a group of components existing on said wiring, and after extracting circuit information of said driver corresponding to one of said pair];

[extracting] identifying a segment that [includes] is part of said high speed signal wiring and which is nearest to [said] a board edge from a group of segments [each defining a set of a minimum unit of a wiring configuration for said wiring];

[specifying] identifying a plane layer edge that is nearest, in a perpendicular direction, to a wiring between a driver and a receiver [in said segment extracted];

determining a perpendicular distance between the wiring extending from the driver to the receiver of said segment and said plane layer edge;

computing a minimum interlayer distance required between a wiring layer of said segment extracted and said plane layer;

comparing said perpendicular distance determined and said interlayer distance computed; and

displaying a message that contains a predetermined instruction corresponding to said wiring in accordance with a result of said comparison.

7. (Currently Amended) A computer program for [causing a computer to check] analyzing a wiring configuration which is [tentatively] designed on a printed circuit board, comprising the steps of:

determining if there [exists] is a high speed signal wiring [using circuit information of said printed circuit board], said determination being [executed after extracting] made after identifying a pair of a driver and a receiver [sequentially] from a group of components